

## Quarterly Report – Public Page

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Prepared for: **U.S. Department of Transportation, Pipeline and  
Hazardous Materials Safety Administration**  
Project Title: **Improvements to the External Corrosion Direct  
Assessment (ECDA) Process (WP#360): Cased Pipes**  
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Corrpro continued identification and evaluation of technologies that can be used to assess cased pipes. Technologies identified thus far include visual inspection, pressure testing, inline inspection, guided wave ultrasonic, electromagnetic wave, pulsed eddy current, conformable array and bore scope. Of all of these technologies, the three most promising technologies appear to be inline inspection, guided wave ultrasonic inspection and electromagnetic wave inspection. By identifying inline tool, GWUT and EMW inspection technologies as the most promising technologies presently in use or being developed, it is not implied that these are the only technologies worthy of consideration. Several other technologies are under development, some of which have the potential to be more advantageous for inspecting cased pipe than inline tool, GWUT and EMW.

Corrpro continued obtaining information related to cased pipes from pipeline operators. The information is being used for statistical analysis of Cased Pipe ECDA methodology testing. Along with this effort, Corrpro continued identification of buried pipe ECDA indirect inspection surveys it has performed on cased pipe where other technologies (such as inline inspection and guided wave ultrasonic) were used or are planned to be used to assess corrosion damage on cased pipe. Results of ECDA surveys and inline or GWUT inspections will be compared and evaluated to determine effectiveness of ECDA surveys for identifying corrosion damage and coating flaws.

Corrpro continued its participation in the joint PHMSA/Industry cased pipe advisory committee. A meeting of this committee was held in early February, the purpose of which was to begin development of Direct Assessment guidelines for cased pipe that are to be used by PHMSA and pipeline operators. Corrpro employees are involved with identifying ECDA Indirect Inspection tools available for use on cased pipe, developing a preliminary tool selection matrix, and developing a matrix outlining minimum requirements for excavation and detailed examination of cased pipe assessed using ECDA technology. Resulting documents are to be reviewed and further developed during Advisory committee meetings in March and April. Target completion date for committee activities is June 1, 2009.

During the next quarter, Corrpro will participate in the first of two peer reviews and continue to participate in the PHMSA/Industry Cased Pipe Advisory committee. Additionally, work will continue on collecting cased pipe related ECDA data, and processing and evaluating the data to further develop an ECDA process for cased pipe. Work will also continue on determining ease of use, determining advantages and disadvantages, and determining reliability and accuracy of existing corrosion detection tools.